# Montana Department of Natural Resources and Conservation Water Resources Division Water Rights Bureau

#### ENVIRONMENTAL ASSESSMENT

#### For Routine Actions with Limited Environmental Impact

## **Part I. Proposed Action Description**

- 1. Applicant/Contact name and address: Kyle, Steve & Susan Graveley, 2101 Cut Off Rd., Helmville, MT 59843
- 2. Type of action: Application to Change an Existing Irrigation Water Right 76F 30155050
- 3. Water source name: Blackfoot River
- 4. Location affected by project: Sections 25, 26, 27, 28, 29, 32, 33, 34, 35, T14N R11W and Sections 2, 3, 4, 5, 10, 11, T13N, R11W, Powell County.
- 5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: The Applicant proposes to change the point of diversion on Statements of Claim 76F 110716-00 and 76F 110722-00 to two pumps in the Blackfoot River in SWSWSE Section 32, T14N, R11W, and SWSWSW Section 33, T14N, R11W, both in Powell County. The Applicant proposes to change the place of use to four center pivot sprinkler systems covering 101.00 AC in NW Section 5 and 150.00 AC in Section 3, T13N, R11W, 114.00 AC in NE and 133.00 AC in SW Section 32, T14N, R11W, all in Powell County. The Applicant proposes to cease irrigation on 600 AC and retire the original point of diversion and the associated ditch system. The DNRC shall issue a change authorization if an applicant proves the criteria in 85-2-402 MCA are met.
- 6. Agencies consulted during preparation of the Environmental Assessment:

(include agencies with overlapping jurisdiction)

Montana Department of Natural Resources and Conservation

Montana Department of Fish, Wildlife and Parks

Montana Department of Environmental Quality

Montana Heritage Project

Montana Sage Grouse Habitat Conservation Program

United States Fish & Wildlife Service

United States Natural Resource Conservation Service

#### Part II. Environmental Review

1. Environmental Impact Checklist:

# PHYSICAL ENVIRONMENT

## WATER QUANTITY, QUALITY AND DISTRIBUTION

<u>Water quantity</u> – The Blackfoot River is periodically and chronically dewatered in several reaches according to the Montana Department of Fish, Wildlife and Parks. The proposed change in point of diversion and place of use would leave more water instream during the irrigation season and is conditioned on streamflow in the Blackfoot River. The proposed change has the potential to positively impact flows in the Blackfoot River.

Determination: Possible positive impact.

<u>Water quality</u> – Water quality in the Blackfoot River is listed as 4A by the Montana Department of Environmental Quality and the use class is B1. The river does not fully support aquatic life primarily due to metal concentrations. All TDMLs needed to protect the quality of the river are in place. Change in the point of diversion ad place of use of irrigation water from the Blackfoot River has little potential to negatively affect water quality. Irrigated agriculture does have the potential to allow fertilizer to leach into nearby streams.

Determination: No significant impact.

<u>Groundwater</u> – The project does not involve groundwater. Change from flood irrigation to sprinkler irrigation has the potential to reduce infiltration to the groundwater.

Determination: No significant impact.

<u>DIVERSION WORKS</u> – The means of diversion is two pumps in the Blackfoot River that feed water to buried pipelines to center pivot sprinkler systems. The entire system is in place. No impacts to the channel or flow parameters are foreseen. No barriers are created, and no dams or wells will be constructed.

Determination: No significant impact.

#### UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

<u>Endangered and threatened species</u> – The Montana Natural Heritage Program lists 24 animal species of concern in the general area of the project. The list includes three varieties of bat, the Fisher, Preble' Shrew and Grizzly Bear as mammals of concern. There are 16 species of birds listed and two species of fish. The Missoula phlox is the only plant species of concern in the project area. Irrigation of agricultural land has little potential to affect habitat or create barriers to migration or movement. The project area is not within sage grouse habitat as mapped by the Montana Sage Grouse Habitat Conservation Program.

Determination: No significant impact.

<u>Wetlands</u> – According to the United State Fish and Wildlife Service there are abundant wetlands to the south of the project area generally classified as palustrine emergent temporarily to semi-permanently flooded. These wetlands are associated with meander channels and floodplain

regions surrounding the Blackfoot River. The project area is removed from the river floodplain and wetland areas.

Determination: No significant impact.

**<u>Ponds</u>** – There are no ponds in the project area, and none are proposed.

Determination: No impact.

<u>GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE</u> — Principal soil types in the project area are loams represented by Cetrack loam and Quigley-Straw-Water Complex. These soils are non-saline to slightly saline with generally low slopes and good drainage. No degradation of soil quality is foreseen due to irrigation, no alteration of soil slope or stability is planned. The soils are not heavy in salts that could lead to saline seep. Irrigation will increase soil moisture locally.

Determination: No significant impact.

<u>VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS</u> – Existing vegetative cover is agricultural. No change to vegetative cover is proposed. No construction is planned and there is little possibility to establish or spread noxious weeds. It will be the responsibility of the landowner to control the spread of noxious weeds.

Determination: No impact.

<u>AIR QUALITY</u> – Irrigated agriculture has little possibility of negatively affecting air quality or increase pollutants.

Determination: No impact.

**HISTORICAL AND ARCHEOLOGICAL SITES** - THE project is not located on State or Federal lands.

Determination: Not applicable.

<u>DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY</u> – The transition to sprinkler irrigation from gravity driven flood irrigation will increase the demand for electricity.

Determination: No significant impact.

# **HUMAN ENVIRONMENT**

<u>LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS</u> – There are no known locally adopted environmental plans or goals.

Determination: No impact.

<u>ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES</u> — There are no roads or other access to recreational or wilderness activities in the project area. Irrigation of agricultural land will not affect access to any activities.

Determination: No impact.

**HUMAN HEALTH** – Irrigated agriculture has no potential to negatively affect human health

Determination: No impact.

<u>PRIVATE PROPERTY</u> - Assess whether there are any government regulatory impacts on private property rights.

Yes\_\_\_ No\_X\_\_ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: Not applicable.

<u>OTHER HUMAN ENVIRONMENTAL ISSUES</u> - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

## Impacts on:

- (a) <u>Cultural uniqueness and diversity</u>? No significant impact.
- (b) Local and state tax base and tax revenues? No significant impact.
- (c) Existing land uses? No significant impact.
- (d) Quantity and distribution of employment? No significant impact.
- (e) Distribution and density of population and housing? No significant impact.
- (f) Demands for government services? No significant impact.
- (g) Industrial and commercial activity? No significant impact.
- (h) <u>Utilities</u>? No significant impact.
- (i) <u>Transportation</u>? No significant impact.
- (j) Safety? No significant impact.
- (k) Other appropriate social and economic circumstances? No significant impact.
- 2. Secondary and cumulative impacts on the physical environment and human population:

Secondary Impacts: No secondary impacts are recognized.

Cumulative Impacts: No cumulative impacts are recognized.

- 3. Describe any mitigation/stipulation measures: None
- 4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider: The only reasonable alternative to the proposed action is the no action alternative. The no action alternative has no significant environmental benefit over the proposed plan and prevents the landowner from maximizing economic value of their property.

## PART III. Conclusion

- 1. **Preferred Alternative:** issue a change authorization if an applicant proves the criteria in 85-2-402 MCA are met.
- 2 Comments and Responses: None
- 3. Finding:

  Yes\_\_\_ No\_X\_\_ Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: No significant negative impact resulting from the proposed action are recognized and an environmental assessment is the appropriate level of analysis.

*Name of person(s) responsible for preparation of EA:* 

Name: Mark Elison
Title: Regional Manager

Date: 8/18/2022